AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0047] of the specification with the following rewritten paragraph:

[0047] As further shown in Figs. 1 and 2, the flow cytometer 100 can include deflection plates ~~142~~ 1142 and ~~144~~ 1144 which can be controlled by controller 118 to allow droplets to pass to droplet collection container ~~146~~ 1146, or to deflect droplets that have been charged by charging unit 147 towards droplet collection containers ~~148~~ 1148 and ~~150~~ 1150, as appropriate. In additional, a laser and filter arrangement ~~152~~ 1152 and ~~154~~ 1154, detector and filter arrangement ~~156~~ 1156 and ~~158~~ 1158, and detector and filter arrangement ~~160~~ 1160 and ~~162~~ 1162, can be employed to monitor the manner in which the droplets are being deflected. Further details of the charging, deflection, and monitoring of the droplets are described in copending U.S. Patent Application Serial No. 09/346,692, referenced above.

Please replace paragraph [0062] of the specification with the following rewritten paragraph:

[0062] The master data acquisition module 210 further provides and receives data to and from the droplet control module 222 and the fluidics control module 224 to control the operation of the flow cytometer 100 in the manner described above. For example, the master data acquisition module 210 can receive high-speed clock data from the droplet control module 222 that gives the master data acquisition module 210 a time reference as to the rate of drop formation (e.g., 50 thousand drops per second). Master data acquisition module 210 can use this time base to synchronize a direction command signal which can be, for example, a four bit binary code, that the master data acquisition module 210 sends to the droplet control module 222 so that the droplet control module 222 can control the charging unit 147 (see Fig. 2) as appropriate to achieve the desired charging of the appropriate droplets containing a cell or particle of interest. By charging the droplet with the appropriate charge, the droplet control module 222 thus controls the amount and direction of deflection that the deflection plates ~~142~~ 1142 and ~~144~~ 1144 (see Fig. 2) deflect the charged droplet. The deflection plates ~~142~~ 1142 and ~~144~~ 1144 are included among the sorting hardware

235 shown in Fig. 11. The droplet can be deflected, for example, to be received in one of any suitable number (e.g., sixteen) collection vessels ~~142~~ 1142, ~~146~~ 1146 and ~~150~~ 1150.

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Please replace paragraph [0063] of the specification with the following rewritten paragraph:

[0063] In addition, the master data acquisition module 210 can receive data from the processor 194 that has been acquired by, for example, detectors 120, ~~156~~ 1156 and ~~160~~ 1160 that provide information concerning the status of the break-off point 112 (see Fig. 1) as well as information pertaining to the droplet sorting. Based on this data, the master data acquisition module 210 can provide control signal to the droplet control module 222 to control, for example, drop delay, droplet formation and so on as discussed above with regard to Figs. 1 and 2. processor 194 can further control the droplet control module 222 to control, for example, a cooling module 234 and an aerosol management module 236 to control the temperature of the sorted sample, for example, as well as to control sorting and aerosol containment management and safety devices in the flow cytometer 100. It is also noted that the fluidics control module 224 can control the valve and pump drivers 226, the agitation module 228, the temperature control module 230 and the multiport valve HPLC 232 to control the temperature of the fluid sample and sheath fluids, to agitate the sample in the sample reservoir 106 (see Fig. 1), and to control the flow of fluids in the flow cytometer 100.

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Please replace paragraph [0078] of the specification with the following rewritten paragraph:

[0078] Additionally, the event data can be used to process the sample waveforms in various ways. For example, the above system, in particular, the controller 212 (Fig. 11) or SCI controller 238 (Fig. 12) can adjust system can adjust the voltages applied to the detector 186 (PMTs) to adjust the relative zero point of the PMT detector 186. For example, as shown in Fig. 22, the PMT and circuit board 188 includes a DC high voltage power supply 280 that provide the driving voltage to the PMT socket 282 that drives the PMT. The current from the PMT generated upon, for example, detection of

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side scatter light as described above is converted by a current voltage converter 284 so that the voltage signal is provided to the respective channel data acquisition module 208 as described above. Voltage control and serial control signal are provided from the PMT controllers 214 in, for example, the respective channel data acquisition module 208 to adjust the base voltage of the PMT, to therefore adjust the relative zero point of the PMT. [-] Accordingly, this adjustment can be used to perform the gain adjustment as shown, for example, in Fig. 23 to increase the height of the smaller waveform to be consistent with the heights of the red and blue waveforms.